

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

I am the Applicant for  
Yuichi Iikubo  
Serial No.: 09/966,158  
Filed: September 28, 2001

Group: 1764

Examiner:

Title: MATERIALS AND METHODS FOR THE  
PRODUCTION AND PURIFICATION OF  
CHLOROFLUOROCARBONS AND  
HYDROFLUOROCARBONS

February 11, 2002

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TC 1700

INFORMATION DISCLOSURE STATEMENT

BOX PATENT APPLICATION

Commissioner for Patents  
Washington, D.C. 20231

Sir:

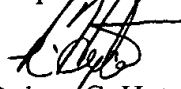
Applicant wishes to bring to the attention of the Examiner the documents identified on the attached form PTO/SB/08A-B. Applicants respectfully request that these documents be made of record in the present application.

Only one of the identified documents is not in English. This particular document is EP 0 539 989 A1. In compliance with 37 CFR 1.98(a)(3), the applicant submits the following concise explanation and translation of EP 0 539 989 A1 as provided by the SciFinder database:

CF<sub>3</sub>CHFCCF<sub>3</sub> was prepared by hydrodechlorination of  
CF<sub>3</sub>CClFCF<sub>3</sub> (I) using the catalysts Pt, Pd, Ru, Rh, Ni, or Cu at  
100-400° and 1-50 bar H<sub>2</sub>. The molar ratio of I with H<sub>2</sub> is 1:1 to  
1:10.

If any fees are necessary in connection with this document, please charge Deposit  
Account No. 02-0390, Baker & Daniels.

Respectfully submitted,

  
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Attorney for Applicant

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Enclosure: Form PTO/SB/08A-B



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February 11, 2002

By: \_\_\_\_\_

*Stephanie Cox*  
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PTO/SB/08A (10-96)  
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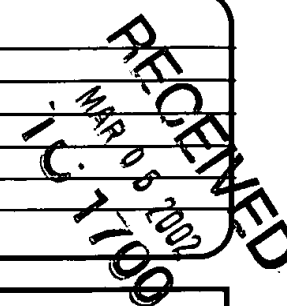
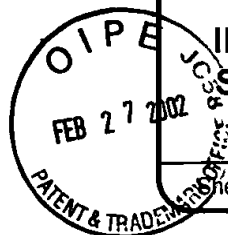
# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet **1** of **3**

**Complete if Known**

Application Number	09/966,158
Filing Date	09/28/2001
First Named Inventor	Yuichi Iikubo
Group Art Unit	1764
Examiner Name	
Attorney Docket Number	GRLK-003



## **U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	1	2,005,706		H.W. Daudt et al.	06/18/1935	
	2	2,005,707		H. W. Daudt et al.	06/18/1935	
	3	2,576,823		A. F. Benning et al.	11/27/1951	
	4	2,697,124		R. M. Mantell et al.	12/14/1954	
	5	2,900,423		L. B. Smith et al.	08/18/1959	
	6	2,942,036		L. B. Smith et al.	06/21/1960	
	7	3,258,500		F. W. Swamer et al.	06/28/1966	
	8	3,436,430		L. E. Hall et al.	04/01/1969	
	9	3,636,173		L. E. Gardner	01/18/1972	
	10	3,803,241		I. Stolkin et al.	04/09/1974	
	11	4,158,023		von Halasz	06/12/1979	
	12	5,043,491		Webster et al.	08/27/1991	
	13	5,057,634		Webster et al.	10/15/1991	
	14	5,068,472		Webster et al.	11/26/1991	
	15	5,068,473		Kellner et al.	11/26/1991	
	16	5,146,018		Kellner et al.	09/08/1992	
	17	5,171,901		Gassen et al.	12/15/1992	
	18	5,177,273		Bruhnke et al.	01/05/1993	
	19	5,220,083		Webster et al.	06/15/1993	
	20	5,268,343		Hopp et al.	12/07/1993	

## **FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	1	CA	1,162,511		von Halasz	05/02/1991		
	2	CA	2,081,813		Hopp	10/30/1992		
	3	EP	0 349 115 A1		E.I. DuPont De	01/03/1990		
	4	EP	0 434 407 A1		E.I. DuPont De	06/26/1991		
	5	EP	0 442 075 B1		Chemical Abstracts	08/11/1993		
	6	EP	0 539 989 A1		Hoechst Aktienges	05/05/1993		
	7	WO	WO 91/05752		E.I. DuPont De	05/02/1991		
	8	WO	WO 96/17813		E.I. DuPont De	06/13/1996		
	9	WO	WO 98/50327		Imperial Chemical	11/12/1998		
	10	WO	WO 99/26907		Imperial Chemical	06/03/1999		

Examiner Signature		Date Considered	
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<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Sheet 2 of 3

**Complete if Known**

Application Number	09/966,158
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Filing Date	09/28/2001
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First Named Inventor	Yuichi Iikubo
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Group Art Unit	1764
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Examiner Name

Attorney Docket Number | GRLK-003

## U.S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

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# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

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Sheets: 3 of 3

## **Complete if Known**

Application Number	09/966,158
Filing Date	09/28/2001
First Named Inventor	Yuichi Ikubo
Group Art Unit	1764
Examiner Name	
Attorney Docket Number	GRLK-003

## **OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	1	HERBERT O. HOUSE, "CATALYTIC HYDROGENATION AND DEHYDROGENATION," MODERN SYNTHETIC REACTIONS, 2nd ed., THE BENJAMIN/CUMMINGS PUBLISHINGS COMPANY (Menlo Park, CA), p. 1/2,	
	2	DMITRII D. MOLDAVSKII, "TECHNOLOGY FOR THE PREPARATION OF PERFLUORO-ORGANIC COMPOUNDS," Journal of Fluorine Chemistry, Elsevier Science S.A. (Netherlands), Vol. 94 ( No. 2), p. 157-167, ( February 5, 1999).	
	3	J. KVICALA ET AL., "Preparation of Perhalogenated Chlorofluoropropanes by Halogen Exchange in the Liquid and Vapour Phases and Their Isomer Analyses by 19F NMR Spectroscopy," Journal of Fluorine Chemistry, Elsevier Sequoia (Netherlands), p. 155-175, ( February 5, 1989).	
	4	F. J. METTILLE ET AL., "Methods for the Introductions of Hydrogen into Fluorinated Compounds," Fluorine Chemistry Reviews, 1st ed., Vol. 1 ( No. 2), p. 315-358, ( February 5, 1967).	
	5	DR. MARK D. CISNEROS ET AL., "An Integrated Approach to Achieve Low Environmental Impact in the Speical Hazards Fire Suppression Industry," Great Lakes Chemical Corporation (West Lafayette, Indiana), p. 1-8,	
	6	VIACHESLAV A. PETROV ET AL., "Isomerization of Halopolyfluoroalkanes by the Action of Aluminum Chlorofluoride," Journal of Fluorine Chemistry, Elsevier Science S.A. (Netherlands), p. 125-130, ( February 5, 1998).	
	7	B. P. AGGARWAL ET AL., "Chlorination of Propane and Propylene and Pyrolysis of Perchloropropane," Petroleum & Hydrocarbons, Vol. 3 ( No. 2), p. 69-72, ( July 5, 1968).	
	8	ALBERT L. HENNE ET AL., "Fluorinated Derivatives of Propane and Propylene," p. 496-497, ( March 5, 1946).	
	9	KIRK-OTHMER, "Encyclopedia of Chemical Technology," Cataysis, 3rd ed., John Wiley & Sones (New York), p. 16-18,	
	10	MILOS HUDLICKY, "Chemistry of Organic Fluorine Compounds," A Laboratory Manual with Comprehensive Literature Coverage, 2nd ed., Ellis Horwood (New York), p. 170-179, ( February 8, 1992).	

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